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DEPARTMENT OF DEFENSE TEST METHOD STANDARD FOR ENVIRONMENTAL ENGINEERING CONSIDERATIONS AND LABORATORY TESTS



AMSC F4766 FSC ENVR

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MIL-STD-810E NOTICE 3 31 JULY 1995

DEPARTMENT OF DEFENSE

ENVIRONMENTAL TEST METHODS AND ENGINEERING GUIDELINES

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1. THE FOLLOWING PAGES OF MIL-STD-810E HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
i	31 JULY 1995	i	14 JULY 1989
ii	31 JULY 1995	ii	1 SEPTEMBER 1993
iii	31 JULY 1995	i i i	1 SEPTEMBER 1993
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FOREWORD

This test method standard is approved for use by all Departments and Agencies of the Department of Defense. Although prepared specifically for DoD applications, this standard may be tailored for commercial applications as well.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: ASC/ENSI, Bldg 125, 2335 Seventh St Ste 6, Wright—Patterson AFB OH 45433—7809 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

MIL—STD—810E has been revised to require careful attention to environments throughout the development process. A course of action for determining and assessing the environments to which an item will be exposed during its service life has been added to section 4, General Requirements. The additional General Requirements aid in preparation for design and preparation for test. Documentation requirements for the design and testing process have also been added to section 4.

The bulk of the standard remains devoted to test methods. Individual methods have been revised to encourage accurate determination of the environmental stresses that an equipment will encounter during its service life. Guidance for accelerated or aggravated testing during the design process is included in some cases. Each test method has been divided into two sections: Section I provides guidance for choosing and tailoring a particular test procedure, Section II includes step—by—step test procedures. In some methods, not only the test values, but also the sequence of steps is tailorable.

The result of this revision will be that this standard cannot be called out or applied as a fixed, relatively simple routine. Instead, an environmental engineering specialist will have to choose and alter the test procedures to suit a particular combination or sequence of environmental conditions for a specific equipment application.

The methods of this standard are not intended to satisfy all safety compliance testing requirements.

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MIL-STD-810E 31 JULY 1995

CONTENTS

PARAC	IKAPH	PAGE
1.	SCOPE	1
1.1	Purpose	1
1.2	Application	1
1.3	Limitations	1
2.	APPLICABLE DOCUMENTS	1
2.1	General	1
2.2	Government documents	1
2.2.1	Specifications, standards, and handbooks	1
2.2.2	Other Government documents, drawings, and publications	2
2.3	Non-government documents	2
2.4	Order of precedence	2
3.	DEFINITIONS	2
4.	GENERAL REQUIREMENTS	4
4.1	General	4
4.2	Tailoring	4
4.2.1	Objective of tailoring	4
4.2.2	Tailoring tasks	4
4.2.2.1	Environmental management plan	8
4.2.2.2	Life cycle environmental profile	8
4.2.2.3	Environmental design test plan	9
4.2.2.4	Operational environmental verification plan	9
4.3	Use of field/fleet data	9
5.	TEST METHODS	10
5.1	Test conditions	10
5.1.1	Tolerances for test conditions	11
5.1.2	Accuracy of test instrumentation calibration	11
5.1.3	Stabilization of test temperature	11
5.1.3.1	Test item operating	11
5.1.3.2	Test item nonoperating	12
5.1.4	Test sequence	12
5.1.5	Test procedures	
5.1.6 5.2	Test conditions	12
	General test performance guidance	12
5.2.1 5.2.2	Pretest performance record	12 12
5.2.3	Performance check during test	13
5.2.4	Interrupted tests	13
5.2.4.1	In–tolerance interruptions	13
5.2.4.1	Methods 503.3, 506.3, 510.3, 511.3, 514.4, 516.4, and 519.4	13
5.2.4.3	Methods 500.3, 501.3, 502.3, 505.3, 508.4, 509.3, 512.3, 513.4,	15
J.L.7.U	520.1, and 521.1	15
5.2.5	Combined tests	15
5.2.6	Post-test data1	5
5.2.7	Failure criteria	15

Supersedes page iv of MIL-STD-810E

PARAGR	PAGE		
5.2.8	Additional or different failure criteria	16	
5.2.9	Environmental test report	16	
5.3	Climatic regions		
5.3.1	Map of climatic regions		
5.3.2	Delimitation of climatic design types		
5.4	Individual test methods	19	
	OTES		
6.1	Intended use		
6.2	Subject term (key word) listing		
6.3 6.4	Data requirements		
6.5	International standardization agreement		
	Changes from previous issue	20	
METHOD	NO.		
500.3	Low Pressure (Altitude)	500.3-1 - 500.3-10	
501.3	High Temperature	501.3-1 - 501.3-18	
502.3	Low Temperature	502.3-1 - 502.3-14	
503.3	Temperature Shock	503.3-1 - 503.3-14	
505.3	Solar Radiation (Sunshine)	505.3-1 - 505.3-18	
506.3	Rain	506.3-1 - 506.3-14	
507.3	Humidity	507.3-1 - 507.3-16	
508.4	Fungus	508.4-1 - 508.4-16	
509.3	Salt Fog	509.3-1 - 509.3-12	
510.3	Sand and Dust	510.3–1 – 510.3–16	
511.3	Explosive Atmosphere	511.3-1 - 511.3-20	
512.3	Leakage (Immersion)	512.3-1 - 512.3-8	
513.4	Acceleration	513.4-1 - 513.4-14	
514.4	Vibration	514.4-1 - 514.4-A88	
515.4	Acoustic Noise	515.4-1 - 515.4-18	
516.4	Shock	516.4-1 - 516.4-30	
519.4	Gunfire	519.4–1 – 519.4–18	
520.1	Temperature, Humidity, Vibration, Altitude	520.1-1 - 520.1-28	
521.1	Icing/Freezing Rain	521.1-1 - 521.1-10	
523.1	Vibro-Acoustic, Temperature	523.1-1 - 523.1-20	
TABLES			
TABLE		PAGE	
500.3–I	Minimum cargo compartment pressures	500.3–4	
501.3-1	High temperature cycles, climatic	555.5 4	
	category – hot	501.3–7	
501.3–II	High temperature cycles, climatic category – basic hot	501.3–8	

MIL-STD-810E 1 SEPTEMBER 1993

	TABLE		PAGE
	501.3-III	Summary of high temperature diumal	
	502.3–I	cycle ranges Summary of low temperature diumal	501.3–9
	302.0 1	cycle ranges	502.3–5
	503.3-1	Diumal cycle of temperature for high-	
	E02.2 II	temperature climatic categories	503.3–5
	503.3 - 11	High–temperature geographical climatic categories	503.3–6
	503.3–III	Low-temperature geographical climatic categories	
	505.3 – I	Temperature/solar radiation diumal cycles	
	505.3 – II	Spectral energy distribution and permitted tolerances	
_	507.3–I	High humidity diumal categories	
	507.3-II	Test cycles (days)	
	508.4-I	Evaluation scheme for visible effects	
	508.4-11	Test fungi	
ľ	509.3–I	Temperature and pressure requirements for operation at 35°C	
_	512.3-I	Water pressures at various depths	
	513.4–I	Suggested G levels for Procedure I – Structural test	
	513.4–II	Suggested G levels for Procedure II Operational test	
	514.4–I	Vibration environment categories	
	514.4-11	Suggested functional test conditions for propeller aircraft equipment	
	514.4–III	Broadband vibration test values for jet aircraft equipment	
	514.4-IV	Default test peak amplitudes for equipment	
	51 <i>1</i> /_V	on helicopters	
		Vibration criteria for external stores	
		carried on airplanes	514.4–31 – 514.4–33
	514.4–VII	Suggested minimum integrity test durations for equipment installed in aircraft	514.4–39
	514.4-AI	Random vibration program data for secured cargo transportation, composite two–wheeled trailer	514.4-A66
	514.4-AII	Random vibration program data for secured cargo transportation, composite wheeled vehicle	
	514.4-AIII	Narrowband random-on-random vibration program data for secured cargo transportation	
		tracked vehicle	514 4-A68

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See 6.3

Table		Page
514.4-AIV	Narrowband random-on-random vibration program data for 120-mm ammunition transported in	
	MlAl tank wegmann hull rack	514.4-A69
514.4-AV	Narrowband random-on-random vibration program	
314.4-AV	data for 105-mm ammunition transported in M1	
	tank hull rack	514.4-A70
514.4-AVI	Narrowhand random-on-random vibration program	
J14,4-A41	data for 155-mm projectile transported in the	
	bustle rack of the M109 self-propelled howitze	r514.4-A71
514.4-AVII	Narrowband random-on-random vibration program	
214.4.4411	data for 155-mm projectile transported in the	
	deck racks of the M109 self-propelled howitzer	514.4-A72
514.4-AVIII	Narrowband random-on-random vibration program	
314.4 111177	data for 155-mm copperhead ammunition	
	transported on the sponson of the M109	
	self-propelled howitzer	514.4-A73
514.4-AIX	Narrowband random-on-random vibration program	
J14.4 1111	data for 155-mm propelling charges transported	<u> </u>
~	in the M109 self-propelled howitzer	514.4-A74
514.4-AX	Narrowband random-on-random vibration program	
314., 14.	data for installed equipment in the turret	
	of the M109 self-propelled howitzer	514.4-A75
514.4-AXI	Narrowband random-on-random vibration program	
3.4.4	data for installed equipment on the hull wall:	5
	of the M109 self-propelled howitzer	514.4-A76
514.4-AXII	Narrowband random-on-random vibration program	
	data for installed equipment to the	***
	trunnion of the M110 self-propelled howitzer	514.4-A77
514.4-AXIII	Narrowband random-on-random vibration program	•
	data for installed equipment on the deck of t	he
	M110 self-propelled howitzer	514.4-A78
514.4-AXIV	Narrowband random-on-random vibration program	
	data for installed equipment on the gun	63/ / 470
	mount of the M110 self-propelled howitzer	514.4-A79
514.4-AXV	Narrowband random-on-random vibration program	
	data for installed equipment in the hull	
	driver compartments of the M110 self-propelle	514.4-A80
	howitzer	314.4-A60
514.4-AXVI	Narrowband random-on-random vibration program	
	data for installed equipment on the sponsons	53/ / 403
	of the M113 armored personnel carrier	514.4-A81
514.4-AXVII	Narrowband random-on-random vibration program	
	data for installed equipment on top of the	61/ / 400
	M113 armored personnel carrier	514.4-A82
514.4-AXVIII	Narrowband random-on-random vibration program	
	data for installed equipment on the deck of	E3 / / A03
	the Mll3 armored personnel carrier	514.4-A83

<u>Table</u>		Page
514.4-AXIX	Narrowband random-on-random vibration program	
	data for installed equipment on the crew	
	compartment walls of the M113 armored personn	.a1
	carrier	514.4-A84
514.4-AXX	Narrowband random-on-random vibration program	314.4-A84
	data for installed equipment on the walls and	•
	sponson of the engine compartment of the M113	
	armored personnel carrier	514.4-A85
514.4-AXXI	Narrowband random-on-random vibration program	J14.4-80J
	data for installed equipment in the turret	
	of the M60A3 tank	514.4-A86
514.4-AXXII	Narrowband random-on-random vibration program	514.4-R00
	data for installed equipment in the hull of	
i	the M60A3 tank	514.4-A87
514.4-AXXIII	Test durations - installed equipment	514.4-A88
515.4-1	Acoustic noise test category	515.4-9
515.4-11	Suggested acoustic test levels for assembled	
	externally-carried aircraft stores	515.4-11 - 515.4-12
515.4-111	Suggested cavity resonance acoustic test	515.4-13
516.4-1	Suggested drop height for procedure III	516.4-10
516.4-11	Transit drop test	516.4-13
516.4-A-I	Values of k	516.4-29
519.4-1	Suggested generalized parametric equations	
510 / 11	for gunfire-induced vibration	519.4-5
519.4-11	Typical gun configurations associated with	
510 / TTT	aircraft classes	519.4-9
519.4-III 520.1-I	Gun specifications	519.4-10
	Example utilization rates of mission profiles	520.1-7
520.1-11	Suggested random vibration test criteria	
520.1-111	for aircraft equipment	520.1-9
520.1-111 520.1-1V	Ambient outside air temperatures	520.1-10 - 520.1-11
520.1-1V 520.1-V	Combined environment test cycle structure	520.1-17
J20,1-V	Suggested extreme qualification test levels	
520.1-VI	when no other data exist	520.1-18
523.1-I	Qualification test cycle	520.1-19
523.1-II	Typical applications	523.1-4
523.1-111	Relative frequency of mission types	523.1-8
323,1-111	Mission phase analysis (fighter B, strike mission)	
	•	523.1-8
<u>Figure</u>	FIGURES	_
1	How to use MIL-STD-810E	Page
2		xii
3	Environmental tailoring process for military har	dware 5
4	Generalized life cycle histories for military ha	rdware 6-7
_	Interrupted test cycle logic - Methods 503.2, 50 510.2, 511.2, 514.4, 516.3, and 519.3	
5a	World climatic regions - hot	14
	The strangere regions - not	17

	,	Page
<u>Figure</u>		
5b	Unald alimetic regions . CDIU	18
501.3-1	Temperature stabilization curves	501.3-11
505.3-1	ci-viored solar radiation cycle (Procedure 1)	505.3-6
	naily color redistion CVCle	505.3-16
505.3-3	namely of dispenser for drip test	506.3-9
506.3-1	Name of the state	507.3-5
507.3-1	Todasad tomperature-himidity cycles	507.3-6
507.3-2	Assessed temperature-humidity cycle	507.3-7
507.3-3	Salt solution filter	509.3-7
509.3-1	Location of salt solution filter	509.3-7
509.3-2	Variations of specific gravity of salt (NaCl)	
509.3-3	solution with temperature	509.3-9
	Blowing sand test facility (vertical flow)	510.3-9
510.3-1	Blowing sand test facility (horizontal flow)	510.3-10
510.3-2	Specific gravity of n-hexane	511.3-4
511.3-1	An example of differential pressure explosion-relief	
511.3-A1		511.3-12
	valve Chamber, flammable atmosphere testing	511.3-13
511.3-A2	Directions of vehicle acceleration	513.4-5
513.4-1	Basic transportation, common carrier environment,	
514.4-1	vertical avis	514.4-7
514.4-2	Basic transportation, common carrier environment,	514.4-8
-	transverse axis	314.4-0
514.4-3	Basic transportation, common carrier, environment,	514.4-9
	longitudinal axis	514.4-10
514.4-4	Representative spectral shape, wheeled vehicle	514.4-11
514.4-5	Penresentative spectral shape, tracked venicle	514.4-12
514.4-6	Timical mission/field transportation scenario	314.4-12
514.4-7	Suggested vibration spectra for properter afficiant	514.4-17
	and equipment on engines	
514.4-8	Wikwarian teer enectrum for let aircrait	514.4-21
514.4-9	Vibration spectrum for equipment mounted on helicopters	514.4-22
514.4-10	7-per for rotary wing Aircraft	514.4-24
514.4-11	Perpopse threshold spectrum for assembled external	
314.4 44	stores carried on jet aircraft, in the absence of	534 4 03
	flight measurements	514.4-27
514.4-12	Manager vibration response spectrum	514.4-29
514.4-13	Dynamic pressure (q) as a function of Mach number	
	and altitude Suggested vibration test levels for equipment installed	514.4-30
514.4-14	in external stores carried on jet allcrait	514.4-33
514.4-15	Threshold performance random vibration spectrum for	617 / 27
	impedied in chine (non-compat)	514.4-37
514.4-16	Minimum integrity test-aircraft/external store equipment	514.4-39
514.4- <u>1</u> 7	Winimum integrity test-helicopters	314.4-40
514.4-18	Example of acceptable performance within tolerance	514.4-54
514.4-19	Typical package tester	514.4-58
J14.4-17	•) } }	

<u>Figure</u>		Page
515.4-1	Suggested 1/3 octave band spectra for acoustical noise	
	test	515,4-5
515.4-2	One-third octave band spectrum for acoustic testing	
	of assembled externally carried aircraft stores	515.4-6
515.4-3	Typical store profile	515.4-7
515.4-4	Cavity resonance acoustic test levels	515.4-7
516.4-1	Test shock response spectrum for use if measured	
	data are not available	516.4-4
516.4-2	Random test input spectral density yielding equivalent test shock response spectra shown in figure 516.4-1	516.4-5
516.4-3	Example of a shock time history showing effective	316.4-3
	transient duration (T_E)	536 4 3
516.4-4	Terminal-peak sawtooth shock pulse configuration and	516.4-7
	its tolerance limits	E1(/ 0
516.4-5	Trapezoidal shock pulse configuration and its tolerance	516.4-8
	limits	E16 / 11
516.4-6	Typical response of equipment to catapult launches	516.4-11
	and arrested landings showing oscillatory nature	
	of transient	516.4-17
519.4-1	Generalized gunfire induced vibration spectrum shape	
519.4-2	The distance parameter (d) and the depth parameter (R_s)	519.4-4 519.4-6
519.4-3	Multiple guns, closely grouped	
519.4-4	Test level reduction due to gun standoff parameter	519.4-7
519.4-5	Test level reduction due to equipment mass loading	519.4-8
519.4-6	Test level reduction due to depth parameter	519.4-11
519.4-7	Decrease in vibration level with vector distance from	519.4-12
	gun muzzle	519.4-13
519.4-8	Gunfire peak vibration reduction with distance	519.4-13
520.1-1	Test profile generation flow diagram	520.1-4
520.1-2	Bottom up view of a test cycle	520.1-4
520.1-3	Schematic mission profile, altitude and Mach number	
520.1-4	Altitude vs pressure	520.1-8
520.1-5	Qualification test cycle example	520.1-21
520.1-6	Dynamic pressure (q) as function of Mach number and	520.1-22
522 1 1	altitude	520.1-23
523.1-1 523.1-2	Typical aircraft operational mission profile	523.1-7
	Temperature profile for a single mission	523.1-7
523.1-3	Temperature profile for composite mission	523.1-10
523.1-4	Climatic set of temperature profiles for composite	
502.1.5	mission	523.1-10
523.1-5	Climatic set plan showing offset sequence	523.1-12
523.1-6	Dynamic pressure, q, profile for composite mission	523.1-12
523.1-7	Typical arrangement of apparatus	523.1-13

HOW TO USE THIS DOCUMENT

- 1. This document contains 6 sections. Sections 1 through 3 contain general information. Section 4 contains both tailoring guides and general test information that relate to the test methods of section 5. Section 5 contains climatic and dynamic test methods, and section 6 has references to contractual requirements.
- 2. The Procuring Activity/Developer must determine the magnitude of the tailoring effort appropriate for the program in question. Tailoring can provide long range cost savings in that material will be designed and developed to survive its anticipated deployment scenario.
- 3. Paragraph 4.2 explains the tailoring process and the steps involved (see figure 1, How To Use MIL-STD-810E). Paragraph 4.3 explains the use of measured data, and paragraph 6.2 details the contractual requirements in the form of Data Item Descriptions (DID's).
- 4. Each test method of Section 5 is divided into 2 parts: Section I contains background or the enclosed procedures and rationale (where possible) for the test parameters. Section II contains the step-by-step test procedures which require parameter levels that are to be developed by the environmental analyses.
- 5. Section 5 of this document also contains 'fallback' parameter levels which can be applied in section II of each method if better information is not available.
- 6. The test methods of section 5 address various climatic and dynamic environments/situations. The user of MIL-STD-810E must determine which methods are appropriate for the specified program and which test procedures within the test method are appropriate.
- 7. Regardless of which approach is chosen, at the end of Section I of each test method, a list of information is specified that is required in order to conduct the test procedures of Section II of that method. This information must be assembled by the environmental specialist and provided to the equipment supplier.

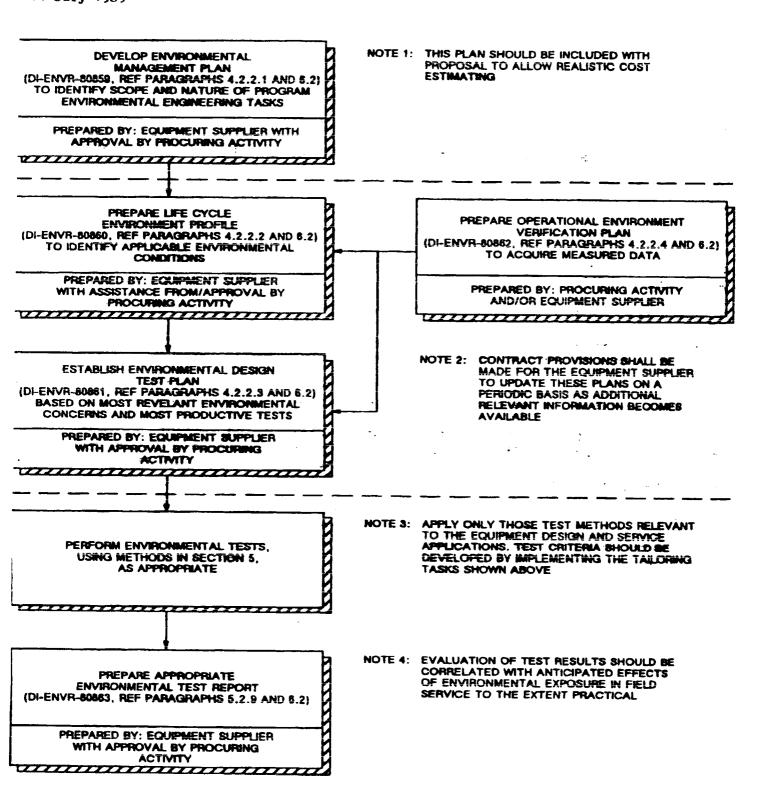


FIGURE 1. HOW TO USE MIL-STD-810E